JAN 27 1992

Removal Site Evaluation for the Bayonne Barrel and Drum Site, Newark, New Jersey

Nick Magriples, On-Scene Coordinator
Technical Support Section

File

I. INTRODUCTION

On September 30, 1991, the United States Environmental Protection Agency (EPA), Removal Action Branch, received a request from the State of New Jersey Department of Environmental Protection and Energy (NJDEPE) to evaluate the Bayonne Barrel and Drum Site for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Removal Action consideration.

There has been a release to the environment of CERCLA hazardous substances at Bayonne Barrel and Drum. An Agency of Toxic Substances and Disease Registry (ATSDR) Health Consultation has stated that current conditions at the site pose a potential public health threat to persons on the site via direct contact. However, the materials present at the site do not appear to pose a significant threat to potential off-site targets. Current negotiations for the sale of the property would result in a cleanup as part of the transaction. The NJDEPE would, in that case, be able to oversee those activities under an administrative order. Should this transaction not take place, a CERCLA Removal Action would be warranted to stabilize the site since there would be no other mechanism available to address the potential threats.

II. SITE CONDITIONS AND BACKGROUND

A. Site Description

1. Physical location

Bayonne Barrel and Drum (BBD) is located at 150-154 Raymond Boulevard in Newark, Essex County, New Jersey. BBD occupies approximately 15 acres of Block 5002, Lots 3 and 14. The site, formerly the location of a drum reconditioning facility, is bounded by Raymond Boulevard and an exit ramp from Routes 1 and 9 to the north and west, an entrance ramp to the New Jersey Turnpike to the east and south, and the parking lot of a movie theater to the south west (see Figure 1). The nearest residential area to the site is approximately one-half mile away.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II

DATE: JAN 27 1992

SUBJECT: Removal Site Evaluation for the Bayonne Barrel and Drum Site, Newark, New Jersey

FROM: Nick Magriples, On-Scene Coordinator
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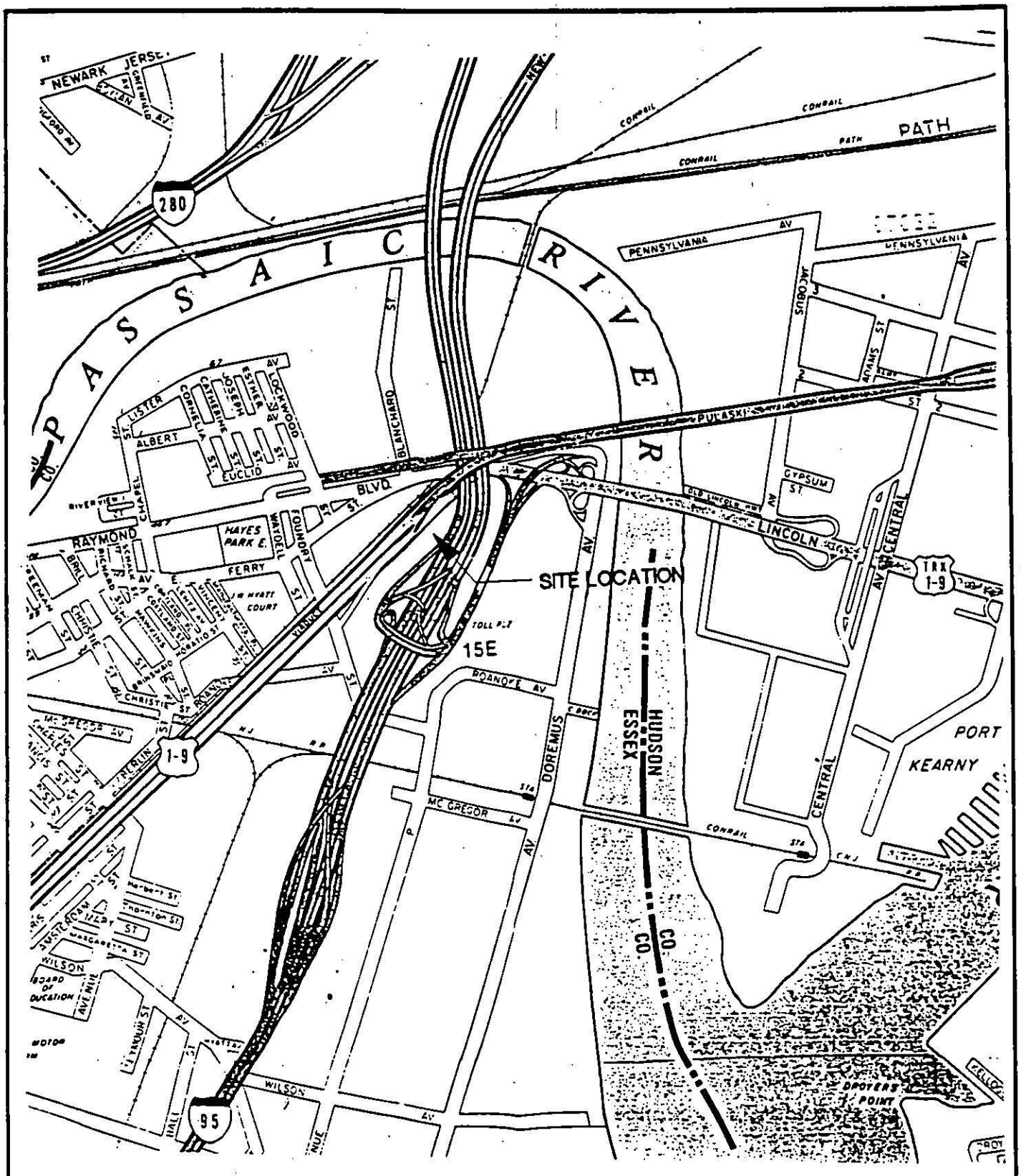


WESTON	Roy F. Weston, Inc. MAJOR PROGRAMS DIVISION	EPA PM N. Magriples	Site Locator
IN ASSOCIATION WITH FOSTER WHEELER CORP., C.C JOHNSON & MALHOTRA, P.C., RESOURCE APPLICATIONS, INC. AND R.E. SARRIERA ASSOCIATES		TAT PM V. Vicenty	Figure 1

hazardous wastes including chlorinated hydrocarbons. The mechanism for future releases to the soil and air include deterioration and/or improper disturbance of the containers present at the site. Contaminants from the soil and ash piles could become airborne if disturbed.

4. Site assessment activities/observations

The following EPA personnel were directly involved in the Removal Assessment conducted for the Bayonne Barrel and Drum Site: Nick Magriples (908-906-6930) and Robert Montgomery (908-906-6934) of the Technical Support Section, Edison, New Jersey.

The Technical Support Section conducted site visits on October 29th and November 7th, 13th and 19th in order to assess the magnitude of the situation.

On November 13, 1991 the OSC, TAT and representatives from the EPA Environmental Services Division (ESD) inspected the three aboveground tanks at the site in order to determine if they contained any materials. Table 1 lists the tanks, their dimensions, any distinguishing features and the volume of material present. Tank 3 contained an amber colored petroleum product. Upon hazcatting, it was found to be combustible. An HNU reading of 80 units was detected from the sample.

The volume of ash material and the number of drums containing material that was noted in previous reports were verified. Most of the drums in the building appear to contain ash. Of the drums in the field, approximately 12 appear to contain some material, mostly less than one-third of a drum.

TABLE 1

	Height (ft)	Diameter (ft)	Volume (gal)	Color
Tank 1	26	8	empty	brown
Tank 2	54	12	empty	white/yellow
Tank 3	23	11	1,140	white

On November 19th, the OSC and TAT collected two composite samples of the ash from the building and the courtyard near the incinerator. The samples were sent to a private laboratory for dioxin and furan analysis. Analytical results revealed 94 parts per trillion (ppt) of 2,3,7,8-TCDD in one sample and a toxicity equivalent factor (TEF) of 973 ppt in the other sample. The TEF is a weighted, total concentration taken from the various dioxin and furan isomers, relative to 2,3,7,8-TCDD.

2. Site characteristics

BBD operated as an unlicensed TSD facility from the early 1940s until the early 1980s when the company filed for bankruptcy under Chapter 11.

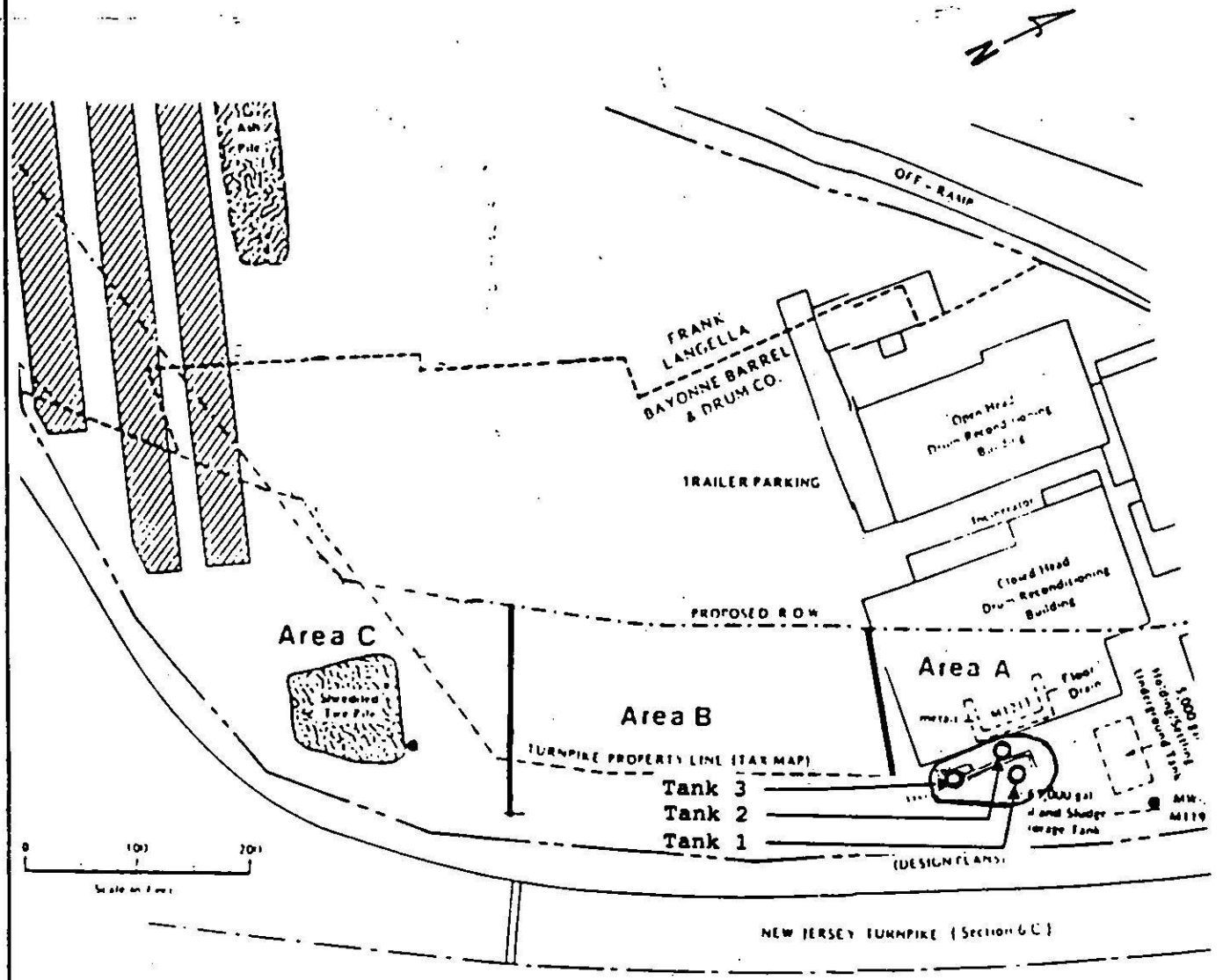
According to an EPA Environmental Services Division report from when the facility was operating, drum cleaning operations involved both closed head and open head drums. In closed head cleaning, chains and a caustic solution were used to wash out previous material in the drums. The spent solution drained through an oil-water separator into a 5,000 gallon underground holding/settling tank and was then pumped into a 60,000 gallon aboveground holding/settling tank. The liquid was decanted to the sewer under a permit to the Passaic Valley Sewage Commission. Open head drums were placed on a conveyor belt and moved through the incinerator which burned residue out of the inside. This residue material was collected in two subsurface holding/settling tanks adjacent to the incinerator. Approximately 40,000 pounds of incinerator ash and sludge were reportedly generated monthly.

Currently, all of the original buildings which existed during the facility's operations remain standing. There are three vertical storage tanks, underground storage tanks, ash piles (approximately 1,600 cubic yards), shredded tires, 300-350 drums and an ash pile in one of the buildings, and 45,000 RCRA empty drums in the field, several of which contain materials (see Figure 2).

3. Release or threatened release into the environment of a hazardous substance, or pollutant or contaminant

An NJDEPE site inspection report dated March 3, 1982 indicated the presence of an ash pile at that time. Samples collected from the pile were found to be ignitable. Additionally, halogenated organic compounds were detected in the pile and its leachate at 3,450 ppm and 2,579 ppm, respectively. In 1985, samples collected by a consultant from the courtyard, near the incinerator feed, indicated petroleum hydrocarbons (16,300 ppm) and PCBs (320 ppm) at a depth of one foot. Except for lower values of PCBs, similar values were detected at the output end of the incinerator. Dioxin was not detected at 0.32 ppb. Samples were also collected from the wastewater treatment area which indicated petroleum hydrocarbons, ranging from 5,920 ppm to 59,000 ppm, from the surface to near ground water.

On February 17, 1984, EPA conducted a RCRA sampling inspection at the site. Analysis of samples collected from the ash piles at the rear of the facility and in the courtyard near the incinerator revealed the following maximum concentrations:



WESTON	**Roy F. Weston, Inc.** **MAJOR PROGRAMS DIVISION**	EPA PM N. Magriples	Tanks Locator
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Contaminant	Highest Concentration Detected (mg/kg)
1,1,1-trichloroethane	7
1,1-dichloroethane	0.5
1,1,2-trichloroethane	5
ethyl benzene	65
methylene chloride	10
tetrachloroethylene	2.6
toluene	320
trichloroethylene	8.1
vinyl chloride	1.6
arochlor 1248	67.2
arochlor 1254	117.5
cadmium	160
chromium	3,300
copper	2,900
lead	21,000
mercury	12
zinc	3,800

mg/kg = milligrams per kilogram

Additionally the ash was found to be E.P. Toxic for lead.

On June 2, 1988, EPA conducted another RCRA inspection at the site. Samples collected from the ash piles, in general, revealed similar results to those presented above. Additionally, the ash was found to be E.P. Toxic for cadmium. PCBs were detected at 293 mg/kg. Analysis of a sample collected from a drum containing liquid (stored in the drum and ash storage building) was found to contain the following concentrations:

Contaminant	Highest Concentration Detected (mg/l)
benzene	92
chlorobenzene	78
ethyl benzene	1,200
tetrachloroethylene	62
xylene	10,000
toluene	2,400
1,3-dichlorobenzene	2.6
1,4-dichlorobenzene	34.2
1,2 dichlorobenzene	167
naphthalene	28.3

mg/l = milligrams per liter

All of the materials listed above, except for petroleum hydrocarbons, are CERCLA designated Hazardous Substances, as listed in 40 CFR Table 302.4. The analytical data presented above is a summary of the most significant data available from the aforementioned reports.

The mechanism for past releases at the site appears to have been spills, poor housekeeping practices, illegal disposal practices and unpermitted wastewater discharges. Past practices of concern at these facilities have included; disposal of chemicals directly to the ground, improper drum storage and incineration of

Air monitoring conducted in the abandoned buildings, the area of the incinerator, the field near the stacked drums and at random spots on the property did not detect anything above background levels, except as noted above.

5. NPL status

BBD is not a National Priorities List (NPL) site.

Although ATSDR has not conducted a full health assessment for the site, they have provided a health consultation for the Removal Program in order to determine if contaminants detected on-site are a public health concern (see Section III).

B. Other Actions to Date

1. Previous actions

There have been no other previous Federal actions taken at the site.

2. Current actions

Currently, there are no Federal actions taking place at the site.

C. State and Local Authorities' Role

1. State and local actions to date

The NJDEPE sent a letter to the Emergency and Remedial Response Division (ERRD) requesting that EPA stabilize the site by inventorying, characterizing and disposing of the abandoned materials at the site.

Until recently, the site had been handled as a developer site under an Administrative Consent Order (ACO). However, the developers decided that it was not feasible to develop the site and subsequently declined to initiate the removal.

2. Potential for continued state/local response

Other than discussed above, there are no other State/local actions taking place at the site. Should the sale of the property take place, the NJDEPE would take responsibility of the site as previously planned.

III. THREAT TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

A. Threats to the Public Health or Welfare

The main threats present at BBD are exposure through direct human contact with the ash piles, the contents of the drums and the soils. The threat of a potential fire exists, but to a lesser extent, due to vandalism, based on the concentrations of organic solvents detected in one of the drums stored within the building. Although a fence surrounds BBD, there are holes cut in several areas that allow for access to the site. Additionally, the portion of the fence that runs along the New Jersey Turnpike entrance ramp is only four feet high.

A November 27, 1991 Health Consultation conducted by ATSDR stated that current conditions at the site do not pose a threat to potential off-site targets. However, there is a potential chronic threat to persons on the site that come into direct contact or disturb the ash or contaminated soils, due to the synergistic effects of the different types of materials present at the site.

B. Threats to the Environment

Hazardous substances are present in the soils and the ground water beneath BBD. Due to the industrial setting that BBD is located in, there does not appear to be a threat to sensitive ecosystems or an exposure to hazardous substances by nearby animals and the food chain. The ground water in the general area is not used for drinking water purposes.

IV. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Delayed action to remove the hazardous substances present at the surface (drums, ash piles and soil) of the site will increase the potential for a fire and/or explosion due to arson and incidental trespassing. Although most of the site is fenced, there are access points available along the exit ramp for Routes 1 and 9, and the entrance ramp for the New Jersey Turnpike.

V. ENFORCEMENT

In 1984, the EPA issued a Consent Agreement and Consent Order to BBD for operating a TSD facility without the required permits. The United States Department of Justice (USDOJ) filed suit against BBD in 1988 for continued RCRA and TSCA violations and failure to comply with the 1984 EPA consent order. A RCRA closure plan for the site was submitted to the NJDEPE on January 4, 1990, but was never formally reviewed because no legal consent instrument was ever agreed upon between the Department and receiving owners of BBD.

BBD went into bankruptcy, under Chapter 11, sometime in the early 1980s. The principle owner of the property, Frank Langella, died on April 13, 1991.

In 1989, the USDOJ ordered BBD to remove the hazardous materials present at the site, starting with the PCB contaminated waste piles. Some effort was recently made to remove the waste piles, but the effort was abandoned upon the death of Mr. Langella.

At this time it is believed that the mortgage is being held by Mr. Phil Pearlman, a Chicago based developer, who bought the BBD mortgage from First Fidelity Bank as a favor to his friend, Frank Langella.

Mr. Milton Raff, a New Jersey real estate agent handling the BBD property for Mr. Pearlman, has leased portions of the site in the past to reportedly provide funding for the guard and the environmental consultants maintained for the site. Currently, a portion of the site is being leased to a chemical trucking firm for parking of empty tankers.

VI. CONCLUSIONS

There has been a release to the environment of CERCLA hazardous substances at BBD. A potential threat of direct contact with exposed and contaminated ash piles and soil exists to persons entering the site. Access to the site is available. The types of materials present pose a chronic threat.

Negotiations between the lien-holder of the property and a prospective buyer are currently on-going. Should the property transaction take place, the DEPE will retain oversight of any cleanup actions that take place under an administrative order. Should there be no transaction, it appears that there would no longer be any party available to take timely and appropriate actions. In the latter case, a CERCLA Removal Action would be warranted to stabilize the site.

VII. RECOMMENDATIONS

A CERCLA Removal Action is recommended for Bayonne Barrel and Drum, should negotiations fail to result in a timely and appropriate cleanup. In this case, the areas of concern would be the ash piles, the contaminated soil near the incinerator, the drums and any materials remaining in the tanks.